

# Forensically Speaking

Seeking truth and justice through science.

## From the Crime Laboratory Director

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Welcome to the first issue of "*Forensically Speaking*". The Forensic Services Division is providing this quarterly newsletter to provide our customers and community with information regarding our services, staff, backlogs, and general forensic related news.

There have been a lot of changes in the Division since I came on board in January 2011. The most obvious being our name change and relocation to a new building. When the CSI Division moved into its new location located within the Thomas Fitzgerald building it grew from 1500 sq ft to 10,000 sq ft and presented the opportunity for long anticipated growth. The CSI Division evolved into the Forensic Services Division which currently encompasses four units: Crime Scene, Fingerprints, Multimedia, and Chemistry (controlled substances, blood alcohol, and trace evidence). In the future, we hope to add more services to our customers in the areas of serial number restoration, impression evidence, firearms/ toolmarks and toxicology.

Besides providing forensic services, the Forensic Services Division stays busy educating the community and local educational facilities, from grade school through college, about the field of forensic science. We are often called upon to provide presentations and tours to the public. Tours/presentations at our facility are usually scheduled on the first Thursday of every month and we try to accommodate all requests.

The Division is currently preparing for ASCLD-LAB International accreditation. It is our goal to undergo the accreditation process in 2013. Once we are accredited, we will be the only law enforcement department with an accredited Crime Scene Unit under this International Standard within the state of Nebraska. In addition, we will be only the second multi-discipline crime laboratory to be accredited in Nebraska. Nebraska State Patrol is accredited in all their laboratory disciplines (Controlled Substances, Toxicology, Biology, Trace Evidence, Firearms/Toolmarks and Latent Prints) and University of Nebraska Medical Center Human DNA Identification Laboratory is accredited in Biology (DNA-Nuclear, body fluid identification, and paternity/relationship testing).

Your feedback and suggestions are always welcome regarding our services. We hope you find this newsletter helpful, interesting, and use it as a resource for your forensic needs.

Tracey M. Ray  
Crime Laboratory Director  
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## Editorial - Reflections on CSI Testimony

By Ashley Paggen - CSI I

When a day in the life of a Crime Scene Investigator (CSI) involves testifying in court, anxieties soar and stomachs turn. Knowing, from the day you get hired, that your job has the ultimate goal of assisting the jurors with their decision is one thing; actually doing it, is another.



I have recently had the opportunity to observe my fellow CSIs while they testified to their findings at a recent homicide trial. I, being one who has yet to testify in court, am still attempting to mentally prepare myself for the day that I must undergo the questions of the prosecution and the defense. Having recently observed my colleagues, I have learned the following: prepare ahead of time, it's never too late to correct yourself, breathe, and lastly, pay attention!

First off, in helping another CSI prepare for her testimony, I was able to provide her with an outsider's view of her report results. Initially I didn't understand why she did one thing and not another, but to her, it was clear. I had her practice answering questions in front of me regarding that result.

Quickly I saw the gap in her *knowing* what she did, but not *conveying* it clearly to the jurors. Through preparation and constructive criticism, she was able to provide a clearer answer to the jurors. In thus, prepare, practice, and be open to feedback; your testimony is meaningless if your listeners miss your point.

Secondly, and perhaps the more important aspect of your preparation time, is the off chance that you will catch yourself in an error. If you find an error and you have trial in a few days, it seems to be too careless not to correct it. An amended report is simply an updated report which is explainable. I'd rather update and explain on the stand what has been changed then attempt to explain why I didn't notice my report had an error. In thus, it's never too late correct yourself.

So as I watched my fellow CSIs spend hours pouring over their reports, practicing their answers aloud and memorizing dates, locations, and times, I realized we all need to remember that we are not the defendant on trial and we are not attempting to tell them everything we have ever learned about CSI work. As in, this is not an

exam! It is not our life that hangs in the balance. We simply are teachers, teaching the jurors what we found in a slow, organized, methodical way. Take a deep breath and relax. How much could you learn from a teacher that can't look at you, is trembling, and stuttering over their words? Just breathe.

As a teacher to the jurors, if you want your "twelve students" to pay attention to you, you as a CSI must pay attention to the questions. Providing clear answers to the jurors after they have listened to a very meandering, long winded, vague question from a monotone attorney is truly your best chance of keeping them focused on the point. I have never been so bored as I sat listening to the attorney question about each and every one of thirty \$1 bills that were analyzed for bloodstains.



"And what is this picture of?" "Where on the bill was the suspected bloodstain?" "Is this a fair and accurate representation of what you saw?" Over and over and over again! All to simply tell the jurors that the bills in the suspects pocket had bloodstains all over them. Oh the

*Your testimony is meaningless if your listeners miss your point.*

## Editorial - Reflections on CSI Testimony (Cont.)

*Together it is us  
that speak on  
behalf of the victim.*

monotony of trial. As I watched the jurors begin to daydream, play with their hair and doodle on their notes, I was reminded that we, as the teachers, cannot drift off while on the stand. As tempting as it becomes and as predictable as the questions may seem, keep your wits about you, pay attention, and keep the jurors listening to your attentive answers

With these observations on my side, I hope to sit confidently in the "hot seat" and provide clear and concise testimony when the time comes. Until then, I'll attempt to observe as much CSI testimony as possible and keep an eye out for the questions and answers provided by my colleagues; ensuring that one day I may provide as clear of an answer. After all, together it is us that speak on behalf of the victim. I'm honored to say that in this trial, justice was served and the Douglas County Sheriff's Office CSIs and fellow deputies taught their student jurors what murder in the first degree looks like.



## Upcoming Training Opportunities

March 20-21<sup>st</sup> Universal Latent Workstation  
Contact:: [Joshua.connelly@douglascounty-ne.gov](mailto:Joshua.connelly@douglascounty-ne.gov)

April 16- 20 Bloodstain Interpretation  
To register visit: [www.iptm.org](http://www.iptm.org)

May 2-4 Advanced Sexual Assault Crime Scene Processing  
To register visit: [www.iptm.org](http://www.iptm.org)

May 21- 25 Crime Scene Reconstruction of Shooting Incident  
To register visit: [www.iptm.org](http://www.iptm.org)

Aug 13-17 IAI Certification Test Prep  
To register visit: <http://www.forensicpieces.com/lists/2-course-descriptions/items/24-crime-scene-certification-text-book-review-all-levels>

Sept 10-12 CSI & Forensic Entomology  
Contact: Douglas A Young (720) 984-2403 or [triadforensics@gmail.com](mailto:triadforensics@gmail.com)

Dec 3-6 Scientific Analysis: Applying ACE-V and Daubert to Testimony  
Contact: Angie Olson (402) 444-6625 or Michele Triplett 206-819-3385



## CSI Unit

The Crime Scene Investigators at the Douglas County Sheriff's Office were recently involved in providing testimony regarding a homicide that took place in September 2010. The amount of time and preparation that is put into getting ready to testify in a case such as this is significant and can range from a few weeks to a few months depending on the details, the amount of information, and if there will be multiple trials, as in this case.

Preparations can include one or several pre-trial meetings with the prosecuting attorney, extensively reviewing case reports, diagrams, evidence, and photos, and anticipating and preparing for any questions that may be asked by the defense. Sometimes the county attorney may request additional services such as preparing enlargements of photos, generating computer diagrams of the crime scene for easy viewing by the jurors, or creating a log or diagram of phone calls made by the victim and/or suspects or other subjects relating to the case.

The crime scene investigator needs to be prepared, not only for questions relating to the case, but also to convince the judge and jury that they are effectively trained and experienced to do a thorough job of processing a scene and completing any follow up processing and investigative

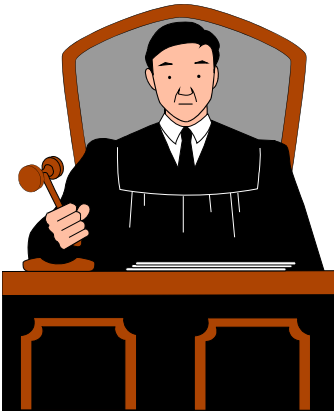
work that may be required after the initial scene has been released.

For the crime scene worker, this means ensuring their curriculum vitae (CV) is up to date and reviewing any related training that the investigator may have taken in the past as well as the dates that correspond to the trainings. Some investigators may think that some of this information is unnecessary to review, such as what the investigator's educational background is and what their specific job duties are; however (and this is especially true for investigator's with minimal testimony experience) these are questions that should be considered so that they may be answered directly and confidently. Other information that should be reviewed is certain lingo that may be commonly used by crime scene investigators or law enforcement and either the prosecuting or defense attorney may ask for clarification on. The investigator should be ready with intelligent and well-prepared answers to questions such as these, as to add to their credibility.

Regardless of the opinions and biases that others, including some law enforcement officers or the prosecuting attorney may have, it is crucial for the crime scene investigator to keep an impartial attitude in all regards of the case. Opinions of guilty par-

ties or ones that are not supported by facts should not be mentioned during testimony. Every time a crime scene investigator testifies in a trial they must always keep in mind that their job is to stick to the facts. It is not their job to prove or disprove a case or a theory. The investigator should only report facts and never testify to something they are unsure of. It is better for any professional witness to answer with "I don't know" or "I don't recall that information" than to give an answer that they are not completely sure of.

It can be daunting when preparing to give testimony in a case that will, undoubtedly, affect many lives. But with the proper amount of time and preparation, the crime scene investigator can be an effective and confident witness. When accurately presented testimony is offered, it will ensure that a jury can effectively reach a fair and just verdict.



## Latent Fingerprints

The Latent Print Unit is dedicated to providing superior evidence processing and fingerprint comparison services to the Metro Omaha area. We have provided our services to all local area police departments and sheriff's offices as well as several branches of the federal government, including the FBI, USSS, ATF, and the DEA.

For the month of December, we processed 30 requests totaling 124 samples. In 2011, we were fortunate enough to receive a renovated, state-of-the-art building that included a dedicated

latent fingerprint lab, complete with new equipment (including a cabinet-style superglue fuming chamber) to better provide our services to the community at large. We also have the ability to search through the FBI's fingerprint database, IAFIS, which allows us to search the offender fingerprint database from all 50 states.

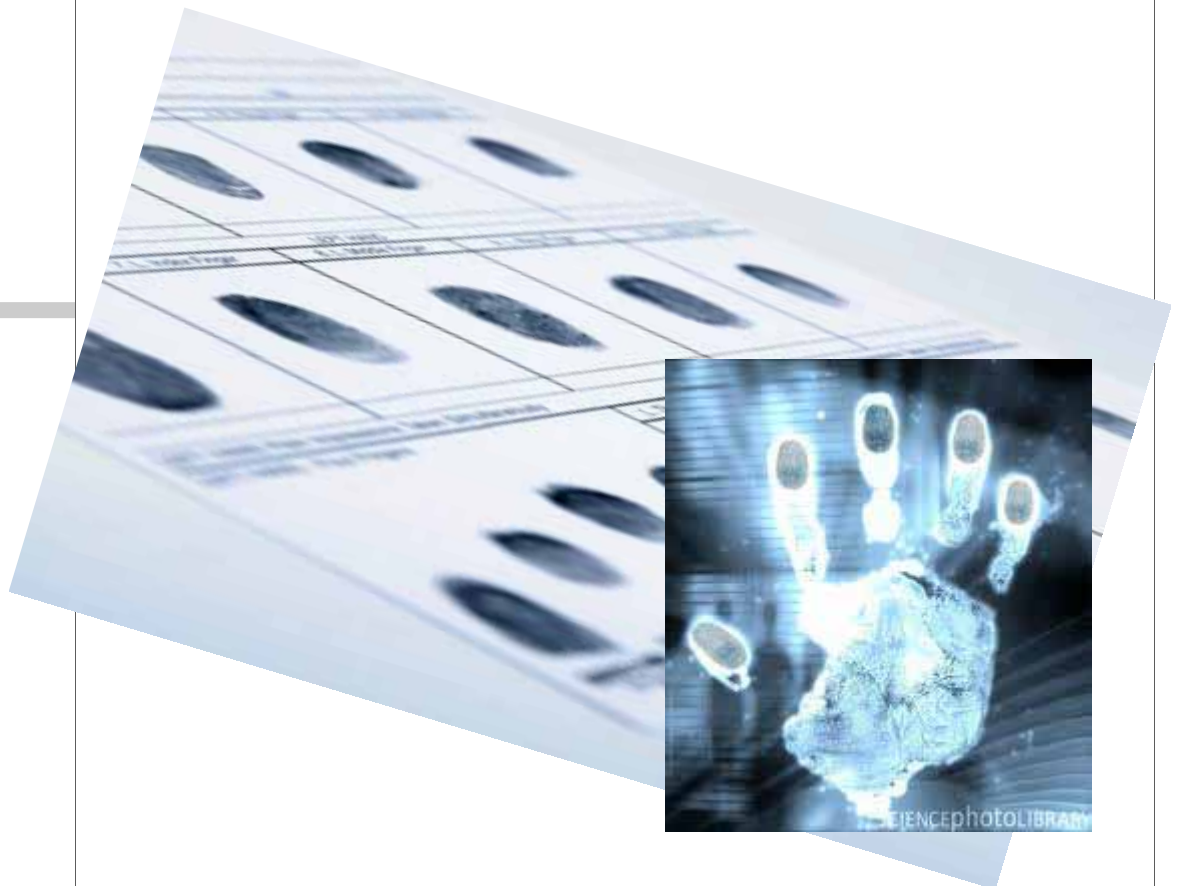
The Latent Print Unit consists of one full-time and one part-time examiner. Both examiners are preparing to become certified latent print examiners (CLPE) in 2012 through the International Association for Identification.

If there are any questions related to fingerprint processing (what items can be processed for fingerprints) or fingerprint comparisons, please call the Latent Print Unit at 402-444-6855 or email us.

### Backlog

As of the end of December, the latent unit has a backlog of 57 cases and a turn around time of 21 days.

*Renovated, state-of-the-art building  
with a dedicated  
latent fingerprint lab*





## Chemistry

The Chemistry Unit is excited about recent news from the Nebraska Legislature. A bill has been introduced (LB814) that addresses the issue of designer drug abuse; a growing problem across the country. The Attorney General's office worked with forensic chemists to achieve the best possible bill - one that would properly address the variety of designer drugs and one that would make it easiest for chemists to testify in court regarding the identity of the substance.

This bill specifically addresses drugs known as "bath salts". These particular bath salts, also marketed as pond scum remover or plant food, are sold in head shops, specialty shops and gas stations for around \$40 for about 4 grams of drug. These substances are not bath salts at all - they are manufactured chemicals. The people that make and market these bath salts take a known drug (in this case a drug called Cathinone) and change it's chemical structure just enough that the substance can no longer be called Cathinone and therefore is not illegal. The chemical is still similar enough to the original drug that it has the same stimulant effect on the body, including such negative effects as paranoia, heart palpitations, and seizures. Since it would be illegal for these drug makers to sell these chemicals as something for human consumption, they market the substance as "bath salts" because it is legal to sell bath salts. They clearly mark the package as "not for human consumption", which is a pretty good indicator that it is actually a drug and not a bath salt.

The new legislation would make these chemicals illegal, as they have no legitimate use and are being shown to be addictive and cause violent behavior. Google bath salts and you will find stories across the country about the issues that these drugs cause.

LB814 was written in a manner similar to a bill that passed last year, LB19. LB19 was also written with the assistance of forensic chemists and was written to address a different class of designer drug known as synthetic cannabinoids (syncans). Synthetic cannabinoids include herbal smoking blends such as K2, which is one brand of many of the syncans that are out there. Last year, Nebraska joined many other states across the country in banning these substances that have been shown to induce extreme effects in users, as most recently reported in Omaha with the Millard South shooting where the suspect was found to have these syncans in his system at the time of his death.

*LB814 addresses the issue of designer drug abuse; making it easier for chemists to testify in court regarding the identity of the substance*



### Backlog

As of the end of December, the chemistry unit has a backlog of 63 cases and a turn around time of 52 days in November and 39 days in December.

## Multimedia

The Forensic Services Division Multimedia Unit has two of the most advanced Forensic Video Analysis systems available. Equipped with an Avid Xpress Pro system running the Ocean Systems supplemental software and a Cognitech desktop workstation, the Multimedia Unit is capable of examining almost every type of video format. With the introduction of Digital Video Recorders (DVR) in the late 1990's, traditional analog video is rapidly being phased out. DVR's have the ability to record multiple cameras for extended periods of time without having to worry about changing bulky videocassettes. However, these new digital systems create a variety of problems

for the video analyst. The most serious problem being that all of the DVR manufactures use their own proprietary video recording formats. This can make it very difficult to play the exported videos on any system other than the one it was recorded on. Fortunately, the Multimedia Unit has the appropriate equipment and resources to stay current with the fast changing digital video formats.

The Multimedia Unit will continue to evolve with new technology and processing techniques. There will be a constant battle to maintain the current equipment and abilities, while still incorporating new processes and tools. The ongoing support from

the DCSO and contract agencies will definitely make it a fair fight.

*The Forensic Services Division Multimedia Unit has two of the most advanced Forensic Video Analysis systems available.*



## Quality Corner

In 2009, a report titled *"Strengthening Forensic Science in the United States"* was issued by the National Research Council of the National Academies of Science (commonly referred to as the NAS report). This report contains the findings of a study that was performed by the National Academy of Sciences at the direction of the United States Congress.

The NAS report contains recommendations based on a 4-year long study that took a critical look at each of the forensic disciplines and ultimately assessed the quality of forensic practices. The report observes many findings, and makes a total of thirteen recommendations as a result of the committee's research. These recommendations were used as the basis for federal legislation introduced to the US Senate by Senator Leahy in 2011, *S.132: Criminal Justice and Forensic Science Reform Act of 2011*, which proposes to make many of these recommendations required by law.

Recommendation 7 of the NAS report speaks specifically to the importance of *laboratory accreditation* for crime laboratories:

**Recommendation 7:** Laboratory accreditation and individual certification of forensic science professionals should be mandatory, and all forensic science professionals



should have access to a certification process. In determining appropriate standards for accreditation and certification, the National Institute of Forensic Science (NIFS) should take into account established and recognized international standards, such as those published by the International Organization for Standardization (ISO). No person (public or private) should be allowed to practice in a forensic science discipline or testify as a forensic science professional without certification.

Certification requirements should include, at a minimum, written examinations, supervised practice, proficiency testing, continuing education, recertification procedures, adherence to a code of ethics, and effective disciplinary procedures.

All laboratories and facilities (public or private) should be accredited, and all forensic science professionals should be certified, when eligible, within a time period established by NIFS.

To become accredited by the ASCLD laboratory accreditation board (ASCLD-lab), a lab must demonstrate compliance with the *ISO 17025* standard and the *ASCLD-lab Supplemental Requirements*. ISO stands for *International Organization for Standardization* and their standards are used internationally to regulate fields like health care, engineering, agriculture, etc. ISO 17025 applies specifically to laboratories that perform tests and issue a report of their findings. Throughout the 17025 standards, when they refer to "laboratory" or "testing" this applies to *all* parts of the FS Division, including crime scene - we are still considered to be performing a test at a crime scene even if we just provide documentation and a report.

The thought is that forensic labs should be held to the same quality and good science practices as any other lab; so all places that do testing would follow the same standards as they are accepted by the scientific community to be the best practices possible to ensure quality results.

*Forensic labs should be held to the same quality and good science practices as any other lab*



## Community Service

Thank You

December 21, 2011

Dear Ms. Ray,

I can not tell you how much it means to me that you sent a representative from your office to come and represent your department. I appreciate your consideration and hard work to find Mr. Connelly. His presentation was flawless. I hope you are feeling much better after your surgery, and I hope your health gets better really soon. I would also like to say that it was the most inspirational talk I have ever heard and I hope you know that.

Thank you again for your interest in my education and future career choice. I hope to one day talk to you again.

Thank you.

Sincerely,  
Sarah Fitzpatrick

Thank You!

December 21, 2011

Dear Mr. Connelly,

Having you come and speak to our class was a real pleasure. We all enjoyed your presentation. I really appreciate you taking the time out of your busy schedule to talk to us about your job.

The most interesting story you presented was the one about the man who was found dead in his bed. I can't believe that woman kept him from the professional services for so long! Although, the stories about the young children were really sad.

Thank you so much for coming to speak to our class. Especially filling in on such short notice! It was a great opportunity to learn more about your field of work.

Sincerely,  
K. H. Williamson

many thanks!

Thank you so much for helping us out during our explanation workshop! We really appreciate you both taking the time to present to our kids and for the sheets really enjoyed from you!

Thanks Again! Peter + FC Tatum School

Gabig

Ray  
as County Crime Lab  
45 W Maple Road 68116

Dear Kristine

I want to thank you formally for the excellent tour of the Crime Lab which you provided for the Millard Education Association-Retired members on November 9th. Some personal health issues delayed what would otherwise have been a prompt thank you. Many MEA-retired members commented favorably on the chance to see the facility and in addition to be able to ask questions of you and the others we encountered in the various labs. Kristine, you combined a very professional manner with an informality that set everyone at ease. We know that your main job is not tour guide, but we were very pleased that on November 9th you were our tour guide.

Thank you,

Steve Skinner  
Steve Skinner  
Representing the Millard Education Association-Retired members

Hey  
JOY  
amir  
can

Dear Mr. Connelly,  
your presentation was really  
great. I hope you are  
feeling better after your  
surgery. Thank you for  
taking the time to speak  
to our class.

Cassie

### Employee Spotlight—Darnel Kush

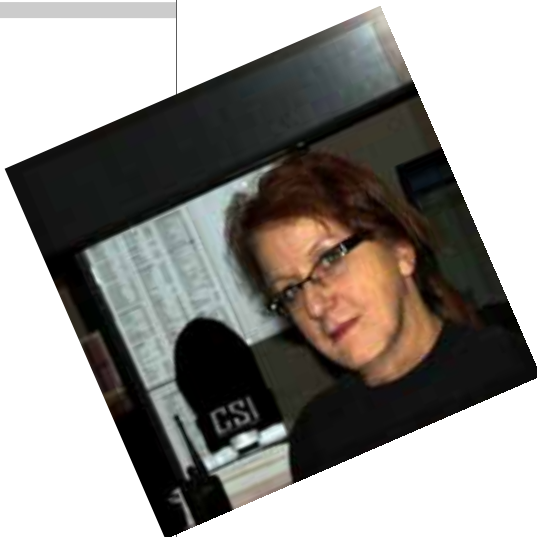
Darnel Kush joined the Douglas County Sheriff Crime Lab team in 1995 after serving nearly eight years of service at the Douglas County Correctional Center; days there were spent controlling inmate movement and maintaining a tight security. Since coming to the Crime Lab Division, Darnel has participated in comprehensive field investigations and has performed all phases of crime scene related duties at an advanced level. To date, Darnel has attended more than 40 crime scene courses and is recognized by the forensic community as a Certified Crime Scene Investigator. Certification is an accomplishment of proficiency and is something she is very proud of.

Starting out, Darnel was the only female working within the Crime Scene Division and one of the very youngest. New to the division, she was supplied with a small desk in a single room and handed a FBI fingerprint manual to study. As a new investigator, part of the daily CSI activities was to manually classify 25 fingerprint cards each day; a long cry from the digital automated fingerprint identification systems used today for classifying, storing, and analyzing fingerprints. Today, many more crime scene books have piled onto Darnel's desk and the overall division has grown and expanded to a whole new level.

Regarded by many as a seasoned crime scene investigator, Darnel has served the community for more than seventeen years investigating crime and documenting hundreds of crime scenes. Highly trained in all facets of evidence collection, the applied knowledge has earned her commendations for a job well done on burglary investigations and recognitions for outstanding performance on major homicide investigations. In 2002, Darnel received a unit citation for her participation in a high-profile homicide case that required exemplary skills. All efforts resulted in arrests and convictions.

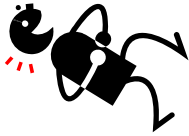
Off duty, Darnel spends time with family and is currently exploring the world of culinary arts. (At the family's discretion) Cooking and baking creates a balanced harmony between the two professions; Offering a change of pace from more serious death investigations to fun and cheery creative cupcake decorating!

*Darnel has served the community for more than seventeen years investigating crime*



Every job is a self-portrait of the person who does it. Best advice to pass on to the new generation of CSI is to sign your work with excellence. I never really had a personal policy; I just tried to do my very best each day.

## Laugh Lines



It was snowing heavily and blowing to the point that visibility was almost zero when Sue got off work. She made her way to her car and wondered how she was going to make it home.

She sat in her car while it warmed up and thought about her situation. She finally remembered her daddy's advice that if she got caught in a blizzard she should wait for a snow plow to come by and follow it. That way she would not get stuck in a snow drift.

This made her feel much better and sure enough in a little while a snow plow went by and she started to follow it.

As she followed the snow plow she was feeling very smug as they continued and she was not having any problem with the blizzard conditions.

After an hour had passed, she was somewhat surprised when the snowplow stopped and the driver got out and came back to her car and signaled for her to roll down her window.

The snow plow driver wanted to know if she was all right as she had been following him for a long time. She said that she was fine and told him of her daddy's advice to follow a snow plow when caught in a blizzard.

The driver replied that it was ok with him and she could continue if she wanted, but he was done with the Wal-Mart parking lot and was going over to Sears next.



## The Scoop

### Cheesy Wild Rice Soup

*By Intern Heather Rohwer*



- 1 lb Bacon
- 1 onion
- 1 Box Uncle Ben's Original Wild Rice include packet (6 oz)
- 2 Cans Cream of Potato Soup
- 2 Pints Half & Half
- 1 cup Velveeta Cheese
- 3 cups Milk

Sauté bacon and onion till bacon is crispy  
Place bacon mixture in crock pot on high with remaining ingredients  
Cook 2 hours then turn down to low and cook an additional 3 hours or until rice is tender.



## Employee Birthdays This Issue

### January

Director Tracey Ray  
Capt. Steve Glandt  
Clelland Retelsdorf

### March

Christine Gabig



**DOUGLAS COUNTY SHERIFF'S OFFICE  
FORENSIC SERVICES DIVISION**

15345 West Maple Road  
Omaha, NE 68116

Main Phone: 402-444-6855  
(8am-5pm, Mon-Fri)

Crime Scene Unit: 402-444-6625  
(24/7, 7 days/week)  
Fax: 402-444-3644

[http://  
www.omahasheriff.org  
/services/fsd](http://www.omahasheriff.org/services/fsd)  
(under construction)

**Latent Print Unit:**

- Joshua Connelly  
Joshua.Connelly@douglascounty-ne.gov
- Angie Olson  
Angie.Olson@douglascounty-ne.gov

**Chemistry Unit:**

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- Shanon Tysor  
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**Multi-Media Unit:**

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Clelland.Retelsdorf@douglascounty-ne.gov

**Crime Scene Unit:**

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- Ashley Paggen  
Ashley.Paggen@douglascounty-ne.gov

## Property and Evidence Division

Hours of Operation are 9-4 Monday through Friday, closed on Wednesday.

Contact information:

Annette Doyle - (402) 444-6747

Annette.Doyle@douglascounty-ne.gov

Sandee Polsley - (402) 444-6824

Sandee.Polsley@douglascounty-ne.gov

Please contact to make an appointment.

## Core Values

The members of the Douglas County Sheriff's Office Forensic Services Division are committed to the following principles:

### Service

Furnish timely and accurate results with reasonable scientific certainty by providing clear and concise reports and by treating all agencies and their evidence with care, respect, professionalism, and confidentiality.

### Quality

Provide the highest quality forensic work to our customers through utilizing only validated procedures that are recognized by the forensic community and by implementing standards in compliance with ISO/IEC 17025:2005 and the ASCLD/LAB accrediting body.

### Integrity

Perform forensic analyses within the parameters of observing the utmost ethical awareness and integrity in the pursuit of the unbiased truth.

### Accountability

Ensure the reliability of analytical results through investing in competency testing of all personnel in each forensic discipline in which they work, and by requiring proficiency testing on an on-going basis.

### Development

To further the development of personnel by providing training opportunities in the latest forensic trends and encouraging membership and active participation in appropriate and reputable forensic science organizations.

Newsletter Creator:

Eileen Patania

Eileen.Patania@douglascounty-ne.gov